

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

(11)特許出願公開番号：

特開平10-127688

(43)公開日 平成10年(1998)5月19日

(51) Int.Cl.⁸

識別記号

FI

A 6 1 F 13/15

A 6 1 F 13/18

3 7 0

B 6 5 D 75/30

B 6 5 D 75/30

A

審査請求 未請求 請求項の数1 OL (全 6 頁)

(21)出願番号

特願平8-293921

(22) 出願日

平成8年(1996)11月6日

(71)出願人 000000918

花王株式会社

東京都中央区日本橋茅場町1丁目14番10号

(72)発明者 梁 裕次

栃木県芳賀郡市貝町赤羽2606 花王株式会社
社研究所内

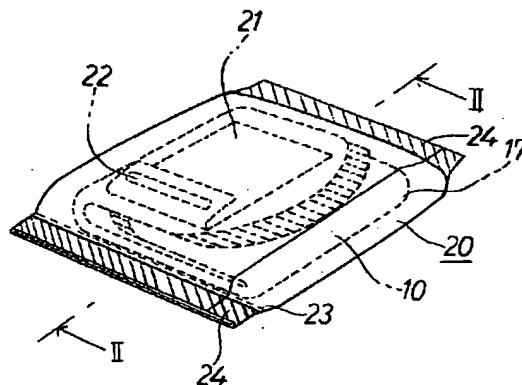
(74)代理人 弁理士 羽鳥 修 (外1名)

(54)【発明の名称】 吸収性物品の包装構造

(57) 【要約】

【課題】 吸収性物品の取り出しをスムーズに行うことができ、吸収性物品を取り出す際に剥離紙が包装材料から外れることがない吸収性物品の包装構造を提供すること。

【解決手段】 吸収性物品としての生理用ナプキン１０と包装材２０とからなり、ナプキンの非肌当接面１２に設けられた粘着層１６と、包装材２０の内表面に固定された剥離紙２１とを、着脱自在に粘着させてなり、該生理用ナプキン１０は、その長手方向に折りたたまれて折曲部１７を形成しており、生理用ナプキン１０の長手方向の側縁に沿って、包装材２０を開封して形成される生理用ナプキン１０の取り出し口が設けられており、剥離紙２１は、取り出し口２６側の端部２７が内表面に固定されており、剥離紙２１は、取り出し口２６側の端部２７が包装材２０の内表面に向けて折り返されて、内表面に固定されている吸収性物品の包装構造。



【特許請求の範囲】

【請求項1】 吸収性物品とこれを包装する包装材とからなり、該吸収性物品の非肌当接面に設けられた粘着層と、該包装材の内表面に固定された剥離紙とを、着脱自在に粘着させてなり、該吸収性物品は、その長手方向に折りたたまれて折曲部を形成しており、該吸収性物品の長手方向の側縁又は該折り曲げ部に沿って、該包装材を開封して形成される該吸収性物品の取り出し口が設けられており、該剥離紙は、該取り出し口側の端部が該内表面に固定されている吸収性物品の包装構造において、上記剥離紙は、上記取り出し口側の端部が上記包装材の内表面に向けて折り返されて、該内表面に固定されていることを特徴とする吸収性物品の包装構造。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】本発明は、ショーツに対し、十分なタック力を有する生理用ナプキンなどの吸収性物品を、剥離紙の廃棄処分が必要ないように包装してなる吸収性物品の包装構造に関する。

【0002】

【従来の技術及び発明が解決しようとする課題】生理用ナプキンなどの吸収性物品には、通常該生理ナプキンをショーツに固定し、且つその使用中におけるずれを防止するための粘着剤と、それを保護する剥離紙とが設けられている。このような吸収性物品においては、その使用に際して、剥離紙を剥離・廃棄する必要があるため、剥離紙の廃棄処分が厄介であり、また、便器に廃棄した場合には便器を詰まらせるという問題がある。

【0003】そこで、剥離紙を有しない吸収性物品の包装構造に関する技術が種々提案されており、具体的には、特開平6-315504号公報において、吸収性物品とこれを包装する包装材とからなり、該吸収性物品の非肌当接面に設けられた粘着層と、該包装材の内表面に固定された剥離紙とを、着脱自在に粘着させてなり、該吸収性物品は、その長手方向に折りたたまれて折曲部を形成しており、該吸収性物品の長手方向の側縁又は該折り曲げ部に沿って、該包装材を開封して形成される該吸収性物品の取り出し口が設けられており、該剥離紙は、該取り出し口側の端部が該内表面に固定されている吸収性物品の包装構造が提案されている。

【0004】このような包装構造においては、図8及び図9に示すような問題があった。即ち、図8に示すように、剥離紙121を包装材120に固定する固定部122を粘着層116の設けられている位置に設けた場合には、矢印方向に向けて取り出す力を掛けても、生理用ナプキン110をスムーズに取り出すことができないという問題があった。また、図9に示すように、固定部222を粘着剤216の設けられていない部分で且つ取り出し口側に設けた場合には、生理用ナプキン210の取り出しはスムーズに行えるものの、上記固定部222に

対して矢印方向の剪断力がかかるため、剥離紙221が包装材220から外れてしまい、その結果、この剥離した剥離紙221が包装材220とは別体のゴミになってしまうという問題があった。

【0005】従って、本発明の目的は、吸収性物品の取り出しをスムーズに行うことができ、吸収性物品を取り出す際に剥離紙が包装材から外れてしまうことがない吸収性物品の包装構造を提供することにある。

【0006】

10 【課題を解決するための手段】本発明は、吸収性物品とこれを包装する包装材とからなり、該吸収性物品の非肌当接面に設けられた粘着層と、該包装材の内表面に固定された剥離紙とを、着脱自在に粘着させてなり、該吸収性物品は、その長手方向に折りたたまれて折曲部を形成しており、該吸収性物品の長手方向の側縁又は該折り曲げ部に沿って、該包装材を開封して形成される該吸収性物品の取り出し口が設けられており、該剥離紙は、該取り出し口側の端部が該内表面に固定されている吸収性物品の包装構造において、上記剥離紙は、上記取り出し口
20 側の端部が上記包装材の内表面に向けて折り返されて、該内表面に固定されていることを特徴とする吸収性物品の包装構造を提供することにより、上記目的を達成したものである。

【0007】

【発明の実施の形態】以下、図面を参照して本発明の吸収性物品の包装構造の1形態について更に詳細に説明する。ここで、図1は、本発明の吸収性物品の包装構造の1形態としての生理用ナプキンの包装構造を示す斜視図である。図2は、図1に示す包装構造のII-II断面図である。図3は、図1に示す包装構造に用いられる生理用ナプキンを示す斜視図であり、図4は、図1に示す包装構造に用いられる包装材を示す斜視図である。また、図5は、図1に示す包装構造を開封して生理用ナプキンを取り出す態様を示す斜視図であり、図6は、図5のVI-VI断面図である。また、図7は、図1に示す生理用ナプキンの包装構造の製造工程の要部を示す概略図である。

30 【0008】本形態の吸収性物品の包装構造としての生理用ナプキンの包装構造1は、図1及び2に示すように、生理用ナプキン10とこれを包装する包装材20とからなり、該生理用ナプキン10の非肌当接面12に設けられた粘着層16と、該包装材20の内表面に固定された剥離紙21とを、着脱自在に粘着させてなり、該生理用ナプキン10は、その長手方向に折りたたまれて折曲部17を形成しており、該生理用ナプキン10の長手方向の側縁に沿って、該包装材20を開封して形成される該生理用ナプキン10の取り出し口26（図5及び図6参照）が設けられており、該剥離紙21は、該取り出し口26側の端部27が該内表面に固定されている。

40 【0009】更に詳しくは、本形態における生理用ナプキンの包装構造1は、生理用ナプキン10の長手方向を

前方部13、中央部14及び後方部15に略3等分する2つの折曲部17において、該後方部15、該前方部13の順序で、該中央部14の肌当接面11側に3つ折にした生理用ナブキン10を、上記粘着層16が上記剥離紙21と当接するように包装材10で包装し、包装材20の両側縁部24及び縁端部25（図3参照）を止着してなる。ここで、上記前方部13は、生理用ナブキン10の使用時において、使用者の前面方向に位置する部位である。また、上記包装材20の両側縁部分24及び縁端部25は、ヒートシールにより接合されており、上記生理用ナブキン10の長手方向の一側縁18に沿って、上記取り出し口26を形成するためのミシン目23が設けられている。

【0010】また、本発明の包装構造により包装される上記生理用ナブキン10は、図3に示すように、非肌当接面12において、前方部13及び中央部14に粘着層16を有している。尚、上記生理用ナブキン10は、肌当接面11が液透過性のシート材により、また、非肌当接面12が液不透過性のシート材によりそれぞれ形成され、更に上記肌当接面11と非肌当接面12との間に液保持性の吸収体を有する、通常の生理用ナブキンである。

【0011】上記粘着層16は、上記非肌当接面12上に粘着剤を塗布するか、あるいは剥離紙21に塗布した後、上記非肌当接面12上に転写する等して形成される。上記粘着層16を形成する粘着剤としては、例えば、スチレン系ブロックポリマー、粘着付与剤及び軟化剤を主成分とし、スチレン相とゴム相との2相ブロック構造を保持しているもの等が用いられる。

【0012】上記スチレン系ブロックポリマーとしては、スチレン-エチレン-ブチレン-スチレンブロック共重合体（SEBS）、スチレン-イソブレン-スチレンブロック共重合体（SIS）、スチレン-ブタジエン-スチレンブロック共重合体（SBS）、スチレン-エチレン-プロピレン-スチレン共重合体（SEPS）等が挙げられる。これらのスチレン系ブロックポリマーは、スチレン部分の分子量が、好ましくは7000～20000、ゴム部分の分子量が、好ましくは35000～70000のブロック共重合体である。

【0013】また、上記粘着付与剤としては、軟化点が80℃以上で、分子量が400～2000であるC、系石油樹脂、C、系石油樹脂、C、/C、系石油樹脂、αピネン、βピネン又はジペンテンの共重合体であるポリテルペン樹脂、ロジン系樹脂、若しくはこれらの水添物等が挙げられる。上記軟化剤としては、軟化点が10℃以下で平均分子量が200～700のプロセスオイル、各種可塑剤、ポリブテン、液状樹脂等が挙げられる。

【0014】上記粘着剤としては、特に下記組成のものが好ましい。

スチレン系ブロックポリマー 100重量部、

粘着付与剤 150～200重量部、
軟化剤 30～100重量部

【0015】また、上記包装材20は、図4に示すように、上記生理用ナブキン10の粘着層16に対応する部分に剥離紙21が固定部22を介して固定されている。上記包装材20としては、厚さ5～20μmのポリオレフィンフィルムが好ましく用いられる。

【0016】また、上記剥離紙21の取り出し口側の端部27は、固定部22を介して上記包装材20の内表面に固定されている。尚、前記端部27は、粘着層16に対する剥離性能を有している必要がないため、該端部27には剥離剤が塗布されていなくてもよい。上記剥離紙21としては、剥離紙基材に剥離剤を塗布したものが好ましく用いられる。上記剥離紙基材としては、厚さ5～50μmのポリプロピレン、低密度ポリエチレン、ポリビニルアルコール等のフィルムあるいは不織布や紙及びこれらの複合材料が好ましく挙げられる。上記剥離剤としては、シリコーン系、フッ素系、イソシアネート系等のものが好ましい。特に上記剥離剤として、シリコーン樹脂系のものを上記剥離紙基材に塗布して加熱乾燥するか、スプレーで吹きつけ薄い被膜を形成させる等して用いるのが好ましい。

【0017】また、上記固定部22は、例えば、接着剤あるいは熱シールにより形成されており、接着剤としては上記粘着層16と同様にスチレン系ブロックポリマーを主成分とするもの等が用いられる。また、熱シールによる場合は包装材、剥離紙基材共にポリオレフィン系フィルムを用いることが好ましい。また、本形態の生理用ナブキンの包装構造1においては、上記生理用ナブキン10を折りたたんだ折曲部17に沿って上記取り出し口26を設けてもよい。但し、本形態の如く、ナブキンを3つ折りした場合には、露出したナブキンの長手方向の端部（上記前方部13側の端部）に沿って上記取り出し口26を設けないほうが取り出し易さの点で好ましい。

【0018】また、上記剥離紙21と上記粘着層16とは、下記測定方法による180°ピール強度が、好ましくは30～90g/50mmとなるように両者を選択するのが好ましい。上記の180°ピール強度となる粘着剤と剥離紙21との組み合わせでは、通常の剥離紙21が包装材20に全面固定されたものにおける剪断強度は、数百g/50mm～数千g/50mmに達してしまい、容易に剥離させることができなくなる。また、剪断強度が低くなるようにして容易に剥がせるようにすると、包装構造の保存時（生理用ナブキンの使用前）において、粘着層16と剥離紙21とが容易に剥離してしまい、該粘着層16が剥離紙21以外の部分に粘着してしまふ等の弊害が生じる。また、取り出し口26の反対側の包装材内面に剥離紙21の固定部22を設けた構成における剪断強度は、本発明のように取り出す側における固定部22を介して固定した剥離紙21を剥離する際の

180°ピール強度よりもはるかに大きく、実際、通常の粘着剤16と剥離紙21との組み合わせにおいては、剥がそうとすると包装材20が破断してしまう。

【0019】<180°ピール強度(接着強度)>粘着剤をポリエチレンテレフタレートフィルムに厚さ50μmで塗布し、ステンレス板(sus304)に2kgのゴムローラー1往復で圧着したときの180°ピール強度を測定した。

【0020】而して、本形態の生理用ナプキンの包装構造1においては、上記剥離紙21は、上記取り出し口26側の端部27が上記包装材20の内表面に向けて折り返されて、該内表面に固定されている。

【0021】更に詳細に説明すると、上記剥離紙21は、上記粘着層16を完全に覆っており、上記取り出し口26側における粘着層16に当接されていない箇所を上記内表面側に向けて折り返しており、更に折り返された側の剥離紙の端部27にて固定部22を介して上記内表面に固定されている。ここで、折り返される部分の長さLは、剥離紙21全体の長さに対して5~50%とするのが好ましい。

【0022】そして、上記生理用ナプキン10の使用時には、先ず、図5及び6に示すように、包装構造1を包装材20に設けられたミシン目23を開けることにより開封し、取り出し口26を形成し、該取り出し口26から生理用ナプキン10を矢印方向に引き出す。この生理用ナプキンの引き出し操作により、図5及び6に示すように、剥離紙21が上記粘着層16から自動的に剥離されて、粘着層16が露出された生理用ナプキン10を取り出すことができ、また生理用ナプキン10を使用することができる。

【0023】本発明の生理用ナプキンの包装構造1は、上述の如く、生理用ナプキン10の長手方向の側縁又は折曲部17から引き出せるようになってあるので、生理用ナプキン10を折りたたんだまま、剥離紙21から粘着層16を剥離させて取り出すことができる。また、生理用ナプキン10を取り出す際に粘着層16が剥離紙21以外の部位に粘着する等の弊害が生じることがない。さらには、図6に示すように、取り出すときに、上記固定部22に無理な剪断力がかからないため、生理用ナプキン10を取り出す際に剥離紙21が包装材20から剥

がれてしまうことがない。

【0024】本形態の生理用ナプキンの包装構造1は、次のように形成される。本形態の生理用ナプキンの包装構造1を形成するには、先ず、図3に示す生理用ナプキンを、その折曲部17において、後方部15、前方部13の順序で、中央部14の肌当接面11側に3つ折りにする。別に、図4に示すように、包装材20に、端部27が折り返された剥離紙21を固定する。次いで、3つ折りにした生理用ナプキンの前方部13及び中央部14に設けられた粘着層16を、包装材20に固定された剥

離紙21に当接させ、包装材20をその両縁端部25、25' (図4参照)が生理用ナプキン10の前方部13側にくるように折りたたみ、最終に包装材20の両側縁部24及び縁端部25を、ヒートシールする等して止着することにより形成することができる。

【0025】更に、図7を参照して、工業的に本形態の生理用ナプキンの包装構造1を製造する方法について説明する。本形態の生理用ナプキンの包装構造1を工業的に製造する場合には、図7に示すように、粘着剤16'が塗布された剥離紙21を生理用ナプキン10'に付設して、粘着層16を形成する粘着層形成工程Aと、生理用ナプキン10に付設された剥離紙21の端部27を折り返す折り返し工程Bと、生理用ナプキン10を3つ折りに折り畳む折り畳み工程Cと、3つ折りに折りたたまれた生理用ナプキン10を包装材20で包装する包装工程Dとを、順次行うことにより製造できる。

【0026】上記粘着層形成工程Aは、剥離紙の連続体21'に粘着剤16'を連続的に塗布し、該粘着剤が塗布された剥離紙の連続体21'を所定箇所にて切断し、切断された剥離紙21をその塗布された粘着剤が非肌当接面12に当接するように生理用ナプキン10'の前方部及び中央部に付設することにより行う。尚、粘着剤16'の塗布及び剥離紙の連続体21'の切断は、それぞれ公知の塗布装置50及び切断装置51を用いて行うことができる。また、付設する際には、ローラー52で押圧するようになされている。上記折り返し工程Bは、公知のフィルム折り込み装置52を用いて、剥離紙21の端部27を上方に(生理用ナプキン10と反対側に)向けて折り返すことにより行う。上記折り畳み工程Cは、公知の折り畳み装置(図示せず)を用いて、上述の順で中央部14の肌当接面11側に後方部14及び前方部13を折り畳むことにより行う。上記包装工程Dは、包装材の連続体20'に固定部22を形成する接着剤22'を塗布した後、接着剤22'が塗布された包装材の連続体20'で、3つ折りにされた生理用ナプキン10を、該接着剤22'が剥離紙21の折り返された端部27に当接するように包装し、最終に所定箇所をヒートシールする等して封止すると共に、取り出し口形成用のミシン目23を形成する(図示せず)ことにより行う。尚、上記接着剤22'の塗布は、公知の接着剤塗布装置54を用いて行う。

【0027】尚、本発明の吸収性物品の包装構造は、上述の形態に限定されるものではなく、本発明の趣旨を逸脱しない範囲で種々変更可能である。例えば、上記吸収性物品としては、羽付きの生理用ナプキンや失禁パッドなどを用いることもできる。

【0028】

【発明の効果】本発明の吸収性物品の包装構造は、吸収性物品の取り出しをスムーズに行うことができ、吸収性物品を取り出す際に剥離紙が包装材から外れてしまうこ

とがないものである。従って、携帯性に優れ、使いやすく、且つ余分なゴミがでないものである。

【図面の簡単な説明】

【図1】図1は、本発明の吸収性物品の包装構造の1形態としての生理用ナプキンの包装構造を示す斜視図である。

【図2】図2は、図1に示す包装構造のII-II断面図である。

【図3】図3は、図1に示す包装構造に用いられる生理用ナプキンを示す斜視図である。

【図4】図4は、図1に示す包装構造に用いられる包装材を示す斜視図である。

【図5】図5は、図1に示す包装構造を開封して生理用ナプキンを取り出す様子を示す斜視図である。

【図6】図6は、図5のVI-VI断面図である。

【図7】図7は、図1に示す生理用ナプキンの包装構造の製造工程の要部を示す概略図である。

【図8】図8は、従来の包装構造における剥離紙の固定部を示す拡大断面図である。

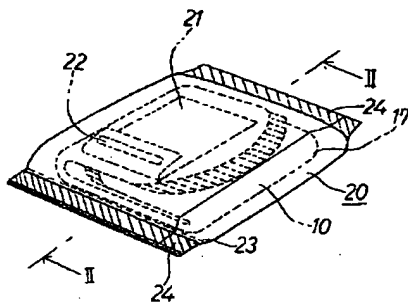
【図9】図9は、従来の包装構造における剥離紙の固定*20

*部を示す拡大断面図である。

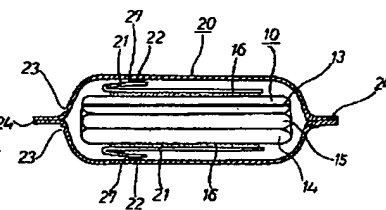
【符号の説明】

- 1 生理用ナプキンの包装構造
- 10 生理用ナプキン
- 11 肌当接面
- 12 非肌当接面
- 13 前方部
- 14 中央部
- 15 後方部
- 16 粘着層
- 17 折曲部
- 18 1側縁
- 20 包装材
- 21 剥離紙
- 22 固定部
- 23 ミシン目
- 24 側縁部分
- 25 縁端部
- 26 取り出し口

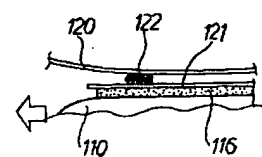
【図1】



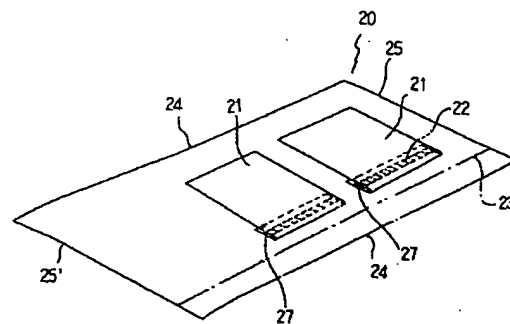
【図2】



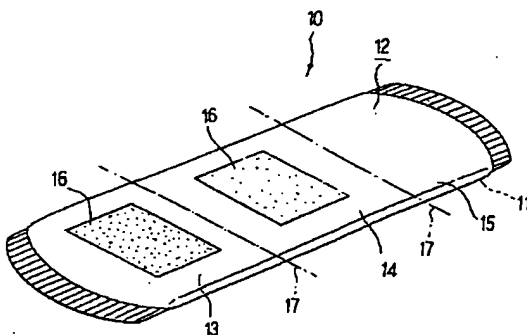
【図8】



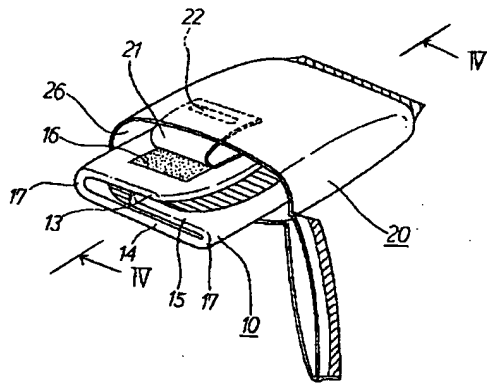
【図4】



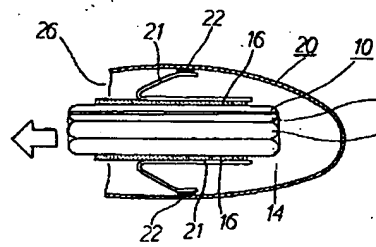
【図3】



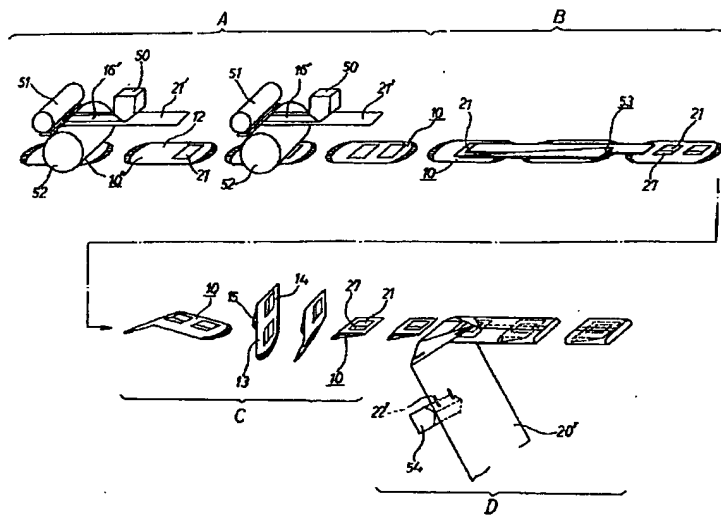
【図5】



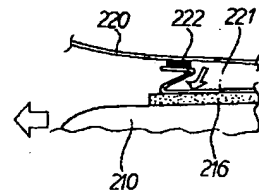
【図6】



【図7】



【図9】



*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1.This document has been translated by computer. So the translation may not reflect the original precisely.

2.**** shows the word which can not be translated.

3.In the drawings, any words are not translated.

Bibliography

(19) [Country of Issue] Japan Patent Office (JP)

(12) [Official Gazette Type] Open patent official report (A)

(11) [Publication No.] JP,10-127688,A

(43) [Date of Publication] May 19, Heisei 10 (1998)

(54) [Title of the Invention] Package structure of absorptivity goods

(51) [International Patent Classification (6th Edition)]

A61F 13/15

B65D 75/30

[FI]

A61F 13/18 370

B65D 75/30 A

[Request for Examination] Un-asking.

[The number of claims] 1

[Mode of Application] OL

[Number of Pages] 6

(21) [Filing Number] Japanese Patent Application No. 8-293921

(22) [Filing Date] November 6, Heisei 8 (1996)

(71) [Applicant]

[Identification Number] 000000918

[Name] Kao Corp.

[Address] 1-14-10, Nihombashi Kayaba-cho, Chuo-ku, Tokyo

(72) [Inventor(s)]

[Name] Beam Yuji

[Address] 2606, Akabane, Ichikaimachi, Haga-gun, Tochigi-ken Inside of the Kao Corp. research institute

(74) [Attorney]

[Patent Attorney]

[Name] Hatori ** (besides one person)

[Translation done.]

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1.This document has been translated by computer. So the translation may not reflect the original precisely.

2.** shows the word which can not be translated.**

3.In the drawings, any words are not translated.

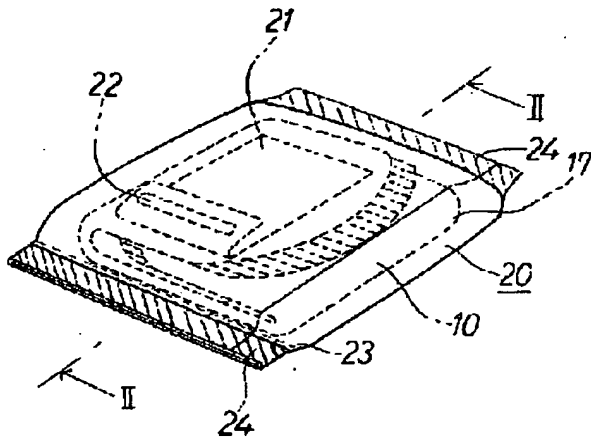
Epitome

(57) [Abstract]

[Technical problem] Perform ejection of absorptivity goods smoothly, and in case you take out absorptivity goods, offer the package structure of the absorptivity goods from which a releasing paper does not separate from a packing material.

[Means for Solution] Consist of a sanitary napkin 10 and a packing material 20 as absorptivity goods, and the adhesive layer 16 prepared in the non-skin contact side 12 of a napkin and the releasing paper 21 fixed to an internal surface of a packing material 20 are made to come to adhere free [attachment and detachment], and this sanitary napkin 10 is folded up by the longitudinal direction, and forms the bending section 17. For a releasing paper 21, the edge 27 by the side of output port 26 is the package structure of absorptivity goods which are turned up towards an internal surface of a packing material 20 in a releasing paper 21, and are being fixed to an internal surface by preparing output port of the sanitary napkin 10 which opens a packing material 20 and is formed along with a side edge of a longitudinal direction of a sanitary napkin 10, and fixing the edge 27 by the side of output port 26 to an internal surface.

[Translation done.]



[Translation done.]

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.

2. **** shows the word which can not be translated.

3. In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

[Claim 1] An adhesive layer which consisted of absorptivity goods and a packing material which packs this, and was prepared in a non-skin contact side of these absorptivity goods, A releasing paper fixed to an internal surface of this packing material is made to come to adhere free [attachment and detachment]. These absorptivity goods It is folded up by the longitudinal direction, form the bending section, and a side edge or this bending section of a longitudinal direction of these absorptivity goods is met. Output port of these absorptivity goods that open this packing material and are formed is prepared. This releasing paper The above-mentioned releasing paper is the package structure of absorptivity goods where an edge by the side of the above-mentioned output port is characterized by being turned up towards an internal surface of the above-mentioned packing material in package structure of absorptivity goods where an edge by the side of this output port is being fixed to this internal surface, and being fixed to this internal surface.

[Translation done.]

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] This invention relates to the package structure of absorptivity goods where pack and the disposal of a releasing paper becomes about absorptivity goods, such as a sanitary napkin which has sufficient tuck force, that it seems that it is unnecessary, to shorts.

[0002]

[Description of the Prior Art] The binder for usually fixing this physiology napkin to shorts, and preventing a gap in use [the] and the releasing paper which protects it are formed in absorptivity goods, such as a sanitary napkin. In such absorptivity goods, since the use is faced and it is necessary to exfoliate and discard a releasing paper, the disposal of a releasing paper is troublesome, and when it discards to a toilet bowl, there is a problem of blocking a toilet bowl.

[0003] The technology about the package structure of absorptivity goods where it does not have a releasing paper is proposed variously. Then, specifically The adhesive layer which consisted of absorptivity goods and a packing material which packs this in JP,6-315504,A, and was prepared in the non-skin contact side of these absorptivity goods, The releasing paper fixed to the internal surface of this packing material is made to come to adhere free [attachment and detachment]. These absorptivity goods It is folded up by the longitudinal direction, form the bending section, and the side edge or this bending section of a longitudinal direction of these absorptivity goods is met. The output port of these absorptivity goods that open this packing material and are formed is prepared, and, as for this releasing paper, the package structure of absorptivity goods where the edge by the side of this output port is being fixed to this internal surface is proposed.

[0004] such package structure — if it was, there was a problem as shown in drawing 8 and drawing 9 . That is, as shown in drawing 8 , when the fixed part 122 which

fixes a releasing paper 121 to a packing material 120 was formed in the location established in the adhesive layer 116, even if it imposed the force come [is taken and] out of and put towards the direction of an arrow head, there was a problem that a sanitary napkin 110 could not be taken out smoothly. Moreover, since the shearing force of the direction of an arrow head was applied to the above-mentioned fixed part 222 although ejection of a sanitary napkin 210 can be performed smoothly when it is the portion in which the fixed part 222 is not formed in a binder 216 and prepares in an output port side, as shown in drawing 9 , the releasing paper 221 separated from the packing material 220, consequently there was a problem that this exfoliative releasing paper 221 will become dust of another object in a packing material 220.

[0005] Therefore, in case the purpose of this invention can perform ejection of absorptivity goods smoothly and takes out absorptivity goods, it is to offer the package structure of the absorptivity goods from which a releasing paper does not separate from a packing material.

[0006]

[Means for Solving the Problem] An adhesive layer which this invention consisted of absorptivity goods and a packing material which packs this, and was prepared in a non-skin contact side of these absorptivity goods, A releasing paper fixed to an internal surface of this packing material is made to come to adhere free [attachment and detachment]. These absorptivity goods It is folded up by the longitudinal direction, form the bending section, and a side edge or this bending section of a longitudinal direction of these absorptivity goods is met. Output port of these absorptivity goods that open this packing material and are formed is prepared. This releasing paper In package structure of absorptivity goods where an edge by the side of this output port is being fixed to this internal surface the above-mentioned releasing paper An edge by the side of the above-mentioned output port is turned up towards an internal surface of the above-mentioned packing material, and the above-mentioned purpose is attained by offering package structure of absorptivity goods characterized by being fixed to this internal surface.

[0007]

[Embodiment of the Invention] Hereafter, with reference to a drawing, one gestalt of the package structure of the absorptivity goods of this invention is further explained to details. Here, drawing 1 is the perspective diagram showing the package structure of the sanitary napkin as one gestalt of the package structure of the absorptivity goods of this invention. Drawing 2 is II-II of the package structure shown in drawing 1 . It is a cross section. Drawing 3 is the perspective diagram showing the sanitary napkin used for the package structure shown in drawing 1 , and drawing 4 is the perspective diagram showing the packing material used for the package structure shown in drawing 1 . Moreover, drawing 5 is the perspective diagram showing the mode which opens the package structure shown in drawing 1 , and takes out a sanitary napkin, and drawing 6 is VI-VI of drawing 5 . It is a cross section. Moreover,

drawing 7 is the schematic diagram showing the important section of the manufacturing process of the package structure of the sanitary napkin shown in drawing 1 .

[0008] The package structure 1 of the sanitary napkin as package structure of the absorptivity goods of this gestalt The adhesive layer 16 which consisted of a sanitary napkin 10 and a packing material 20 which packs this, and was prepared in the non-skin contact side 12 of this sanitary napkin 10 as shown in drawing 1 and 2, The releasing paper 21 fixed to the internal surface of this packing material 20 is made to come to adhere free [attachment and detachment]. This sanitary napkin 10 It is folded up by the longitudinal direction, form the bending section 17, and the side edge of the longitudinal direction of this sanitary napkin 10 is met. The output port 26 (refer to drawing 5 and drawing 6) of this sanitary napkin 10 that opens this packing material 20 and is formed is formed, and, as for this releasing paper 21, the edge 27 by the side of this output port 26 is being fixed to this internal surface.

[0009] In detail furthermore, the package structure 1 of the sanitary napkin in this gestalt In the two bending sections 17 which divide the longitudinal direction of a sanitary napkin 10 equally abbreviation 3 in the front section 13, a center section 14, and the back section 15 in order of this back section 15 and this front section 13 The sanitary napkin 10 made into the skin contact side 11 side of this center section 14 at 3 chip boxes is packed by the packing material 10 so that the above-mentioned adhesive layer 16 may contact the above-mentioned releasing paper 21, and it comes to attach firmly the edges-on-both-sides section 24 and the edge 25 (to refer to drawing 3) of a packing material 20. Here, the above-mentioned front section 13 is a part located in a user's direction of a front face at the time of use of a sanitary napkin 10. Moreover, the edges-on-both-sides portion 24 and the edge 25 of the above-mentioned packing material 20 are joined with heat sealing, and the perforation 23 for forming the above-mentioned output port 26 is formed along with one side edge 18 of the longitudinal direction of the above-mentioned sanitary napkin 10.

[0010] Moreover, the above-mentioned sanitary napkin 10 packed by the package structure of this invention has the adhesive layer 16 in the front section 13 and the center section 14 in the non-skin contact side 12, as shown in drawing 3 . In addition, the above-mentioned sanitary napkin 10 is the usual sanitary napkin to which the skin contact side 11 is formed by the web material of liquid impermeability [side / 12 / non-skin contact] of the web material of liquid permeability again, respectively, and has the absorber of liquid holdout further by it between the above-mentioned skin contact side 11 and the non-skin contact side 12.

[0011] After applying a binder on the above-mentioned non-skin contact side 12 or applying to a releasing paper 21, the above-mentioned adhesive layer 16 carries out imprinting on the above-mentioned non-skin contact side 12 etc., and is formed. As a binder which forms the above-mentioned adhesive layer 16, styrene system block polymer, a tackifier, and a softener are used as a principal component, and the thing

holding 2 phase block structure of a styrene phase and a rubber phase etc. is used, for example.

[0012] As the above-mentioned styrene system block polymer, a styrene-ethylene-butylene-styrene block copolymer (SEBS), a styrene-isoprene-styrene block copolymer (SIS), a styrene-butadiene-styrene block copolymer (SBS), a styrene-ethylene-propylene-styrene copolymer (SEPS), etc. are mentioned. The molecular weight of a styrene portion is desirable, the molecular weight of 7000-20000, and a rubber portion is desirable, and these styrene system BUROKKUPPORIMA is the block copolymers of 35000-70000.

[0013] Moreover, it is C5 whose softening temperature is 80 degrees C or more and whose molecular weight is 400-2000 as the above-mentioned tackifier. System petroleum resin and C9 System petroleum resin, and C5 / C9 The polyterpene resin which is the copolymer of system petroleum resin, an alpha pinene, beta pinene, or a dipentene, rosin system resin, or these hydrogenation objects are mentioned. As the above-mentioned softener, average molecular weight is mentioned [the process oil of 200-700, various plasticizers, polybutene, liquefied resin, etc.] for softening temperature below 10 degrees C.

[0014] Especially as the above-mentioned binder, the thing of the following presentation is desirable.

Styrene system block polymer The 100 weight sections, tackifier The 150 - 200 weight section, softener 30 - 100 weight section [0015] Moreover, as the above-mentioned packing material 20 is shown in drawing 4 , the releasing paper 21 is being fixed to the portion corresponding to the adhesive layer 16 of the above-mentioned sanitary napkin 10 through the fixed part 22. As the above-mentioned packing material 20, a polyolefine film with a thickness of 5-20 micrometers is used preferably.

[0016] Moreover, the edge 27 by the side of the output port of the above-mentioned releasing paper 21 is being fixed to the internal surface of the above-mentioned packing material 20 through the fixed part 22. In addition, since said edge 27 does not need to have the detachability ability to an adhesive layer 16, the remover does not need to be applied to this edge 27. As the above-mentioned releasing paper 21, what applied the remover to the releasing paper base material is used preferably. As the above-mentioned releasing paper base material, a film or a nonwoven fabric, papers, and such composite material, such as polypropylene with a thickness of 5-50 micrometers, low density polyethylene, and polyvinyl alcohol, are mentioned preferably. As the above-mentioned remover, things, such as a silicone system, a fluorine system, and an isocyanate system, are desirable. It is desirable to apply and carry out stoving of the thing of a silicone resin system to the above-mentioned releasing paper base material especially as the above-mentioned remover, or to carry out to spray by the spray and to make a thin coat form etc., and to use.

[0017] Moreover, the above-mentioned fixed part 22 is formed of adhesives or a heat seal, and what uses styrene system block polymer as a principal component like

the above-mentioned adhesive layer 16 as adhesives is used. Moreover, when based on a heat seal, as for a packing material and a releasing paper base material, it is desirable to use a polyolefine system film. Moreover, in the package structure 1 of the sanitary napkin of this gestalt, the above-mentioned output port 26 may be formed along with the bending section 17 which folded up the above-mentioned sanitary napkin 10. However, it is more desirable not to form the above-mentioned output port 26 along the edge (edge by the side of the above-mentioned front section 13) of the longitudinal direction of the exposed napkin, when 3 chip boxes of the napkin are carried out like this gestalt in respect of an ejection easy.

[0018] Moreover, as for the above-mentioned releasing paper 21 and the above-mentioned adhesive layer 16, it is desirable to choose both so that 180-degree Peel reinforcement by the following measuring method may be preferably set to 30-90g / 50mm. It becomes impossible to give the shear strength in what was completely fixed to the packing material 20 to hundreds of g / 50mm - several kg / 50mm, and for the usual releasing paper 21 to make it exfoliate easily in the combination of the binder and releasing paper 21 used as the above-mentioned 180-degree Peel reinforcement. Moreover, if it enables it to remove easily as shear strength becomes low, the evil of this adhesive layer 16 in which the adhesive layer 16 and the releasing paper 21 will not exfoliate easily at the time of conservation of package structure (before use of a sanitary napkin) adhering to portions other than releasing paper 21 will arise. Moreover, if the shear strength in the configuration which formed the fixed part 22 of a releasing paper 21 in the packing-material inside of the opposite side of output port 26 is farther [than 180 degree Peel reinforcement at the time of exfoliating] large and it is actually going to remove the releasing paper 21 fixed through the fixed part 22 of the side taken out like this invention in the combination of the usual binder 16 and a releasing paper 21, a packing material 20 will fracture it.

[0019] 180-degree Peel binder <on the strength (bond strength)> was applied to the polyethylene terephthalate film by 50 micrometers in thickness, and 180-degree Peel reinforcement when being stuck to a stainless plate (sus304) by pressure by platen 1 2kg round trip was measured.

[0020] It **, and in the package structure 1 of the sanitary napkin of this gestalt, the edge 27 by the side of the above-mentioned output port 26 is turned up towards the internal surface of the above-mentioned packing material 20, and the above-mentioned releasing paper 21 is being fixed to this internal surface.

[0021] Furthermore, if it explains to details, the above-mentioned releasing paper 21 has covered the above-mentioned adhesive layer 16 completely, turns to the above-mentioned internal-surface side the part which is not contacted by the adhesive layer 16 by the side of the above-mentioned output port 26, and is being fixed to the above-mentioned internal surface through the fixed part 22 by return at the edge 27 of the releasing paper of the side turned up further. Here, as for length L of the portion turned up, it is desirable to consider as 5 - 50% to the length of the releasing

paper 21 whole.

[0022] And as first shown in drawing 5 and 6 at the time of use of the above-mentioned sanitary napkin 10, it opens by opening the perforation 23 in which the package structure 1 was formed by the packing material 20, output port 26 is formed, and a sanitary napkin 10 is pulled out in the direction of an arrow head from this output port 26. By drawer actuation of this sanitary napkin, as shown in drawing 5 and 6, a releasing paper 21 can exfoliate automatically from the above-mentioned adhesive layer 16, the sanitary napkin 10 with which the adhesive layer 16 was exposed can be taken out, and a sanitary napkin 10 can be used.

[0023] Folding up a sanitary napkin 10, since it had made as [pull / from the side edge or the bending section 17 of a longitudinal direction of a sanitary napkin 10 / it / like ****], the package structure 1 of the sanitary napkin of this invention makes an adhesive layer 16 exfoliate, and can be taken out from a releasing paper 21.

Moreover, in case a sanitary napkin 10 is taken out, the evil of an adhesive layer 16 adhering to parts other than releasing paper 21 does not arise. Furthermore, since shearing force with the above-mentioned fixed part 22 impossible for is not applied when taking out as shown in drawing 6, in case a sanitary napkin 10 is taken out, a releasing paper 21 does not separate from a packing material 20.

[0024] The package structure 1 of the sanitary napkin of this gestalt is formed as follows. In order to form the package structure 1 of the sanitary napkin of this gestalt, the sanitary napkin shown in drawing 3 is first made into the skin contact side 11 side of a center section 14 in the sequence of the back section 15 and the front section 13 in the bending section 17 at 3 chip boxes. Independently, as shown in drawing 4, the releasing paper 21 with which the edge 27 was turned up is fixed to a packing material 20. Subsequently, the adhesive layer 16 prepared in the front section 13 and the center section 14 of the sanitary napkin which were used as 3 chip boxes can be made to be able to contact the releasing paper 21 fixed to the packing material 20, and it can form by making it folding and last to heat seal etc. and attaching firmly the edges-on-both-sides section 24 and the edge 25 of a packing material 20 to them so that both the edge 25 and 25' (refer to drawing 4) may come a packing material 20 to the front section 13 side of a sanitary napkin 10.

[0025] Furthermore, with reference to drawing 7, how to manufacture the package structure 1 of the sanitary napkin of this gestalt industrially is explained. In manufacturing industrially the package structure 1 of the sanitary napkin of this gestalt As shown in drawing 7, the releasing paper 21 with which binder 16' was applied is attached to sanitary napkin 10'. The adhesive layer formation production process A which forms an adhesive layer 16, and the clinch production process B which turns up the edge 27 of the releasing paper 21 attached to the sanitary napkin 10 It can manufacture by performing the folding production process C which folds up a sanitary napkin 10 at 3 chip boxes, and the packaging process D which packs the sanitary napkin 10 folded up at 3 chip boxes by the packing material 20 one by one.

[0026] the above-mentioned adhesive layer formation production process A — the

continuum of a releasing paper — the continuum of the releasing paper with which binder 16' was continuously applied to 21', and this binder was applied — It carries out by cutting 21' in a predetermined part, and attaching the cut releasing paper 21 to the front section and the center section of sanitary napkin 10' so that the applied binder may contact the non-skin contact side 12. in addition, spreading of binder 16' and the continuum of a releasing paper — cutting of 21' can be performed using the respectively well-known coater 50 and cutting equipment 51. Moreover, in case it attaches, it is made as [press / with a roller 52]. The above-mentioned clinch production process B is performed by turning and turning up the edge 27 of a releasing paper 21 up using well-known film insertion equipment 52 (to a sanitary napkin 10 and opposite side). The above-mentioned folding production process C is performed using well-known folding equipment (not shown) by folding up the back section 14 and the front section 13 to the skin contact side 11 side of a center section 14 in above-mentioned order. After applying adhesives 22' which forms a fixed part 22 in 20', it is continuum 20' of the packing material to which adhesives 22' was applied. the above-mentioned packaging process D — the continuum of a packing material — The sanitary napkin 10 used as 3 chip boxes is packed so that this adhesives 22' may contact the edge 27 at which the releasing paper 21 was turned up, and while closing by carrying out heat sealing a predetermined part at last etc., what (not shown) the perforation 23 for output port formation is formed for performs. In addition, spreading of above-mentioned adhesives 22' is performed using the well-known adhesives coater 54.

[0027] In addition, the package structure of the absorptivity goods of this invention is not limited to an above-mentioned gestalt, and can be variously changed in the range which does not deviate from the meaning of this invention. For example, as the above-mentioned absorptivity goods, a sanitary napkin, an incontinentia pad, etc. with feather can also be used.

[0028]

[Effect of the Invention] In case the package structure of the absorptivity goods of this invention can perform ejection of absorptivity goods smoothly and takes out absorptivity goods, a releasing paper does not separate from it from a packing material. Therefore, excessive dust does not come out that it excels in portability and is easy to use.

[Translation done.]

* NOTICES *

Japan Patent Office is not responsible for any damages caused by the use of this translation.

- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.*** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] Drawing 1 is the perspective diagram showing the package structure of the sanitary napkin as one gestalt of the package structure of the absorptivity goods of this invention.

[Drawing 2] Drawing 2 is II-II of the package structure shown in drawing 1 . It is a cross section.

[Drawing 3] Drawing 3 is the perspective diagram showing the sanitary napkin used for the package structure shown in drawing 1 .

[Drawing 4] Drawing 4 is the perspective diagram showing the packing material used for the package structure shown in drawing 1 .

[Drawing 5] Drawing 5 is the perspective diagram showing the mode which opens the package structure shown in drawing 1 , and takes out a sanitary napkin.

[Drawing 6] Drawing 6 is VI-VI of drawing 5 . It is a cross section.

[Drawing 7] Drawing 7 is the schematic diagram showing the important section of the manufacturing process of the package structure of the sanitary napkin shown in drawing 1 .

[Drawing 8] Drawing 8 is the expanded sectional view showing the fixed part of the releasing paper in the conventional package structure.

[Drawing 9] Drawing 9 is the expanded sectional view showing the fixed part of the releasing paper in the conventional package structure.

[Description of Notations]

- 1 Package Structure of Sanitary Napkin
- 10 Sanitary Napkin
- 11 Skin Contact Side
- 12 Non-Skin Contact Side
- 13 Front Section
- 14 Center Section
- 15 Back Section
- 16 Adhesive Layer
- 17 Bending Section
- 18 One Side Edge
- 20 Packing Material
- 21 Releasing Paper
- 22 Fixed Part

23 Perforation
24 Side Edge Portion
25 Edge
26 Output Port

[Translation done.]

*** NOTICES ***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

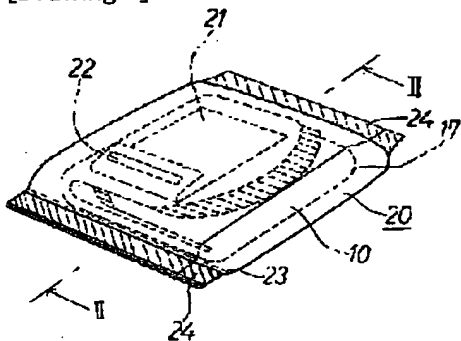
1.This document has been translated by computer. So the translation may not reflect the original precisely.

2.**** shows the word which can not be translated.

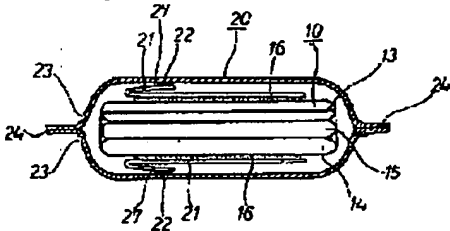
3.In the drawings, any words are not translated.

DRAWINGS

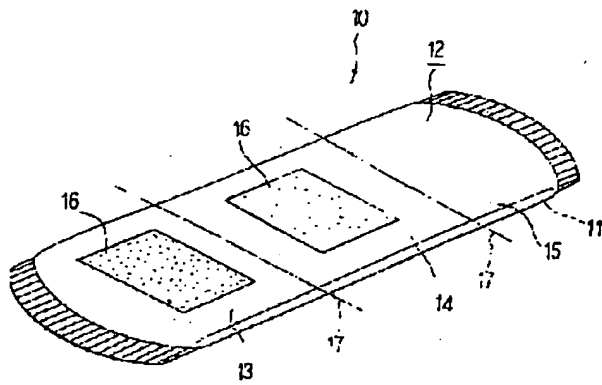
[Drawing 1]



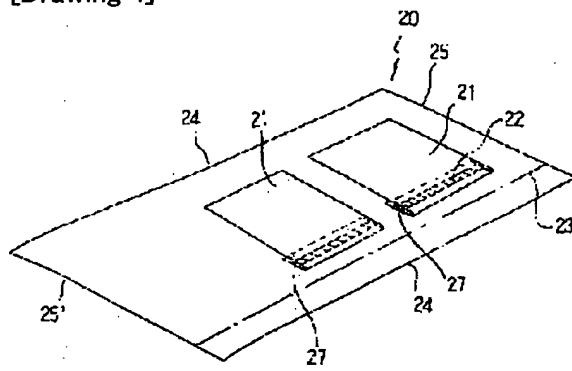
[Drawing 2]



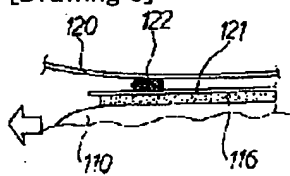
[Drawing 3]



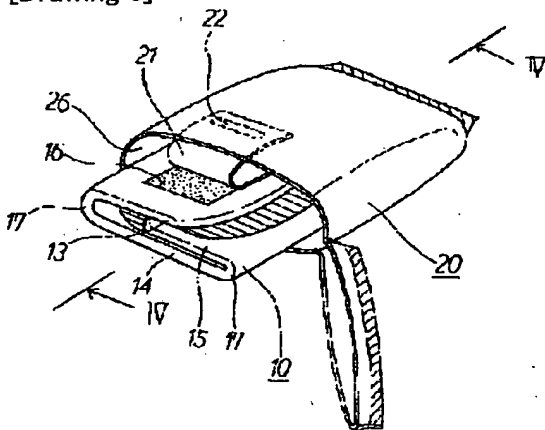
[Drawing 4]



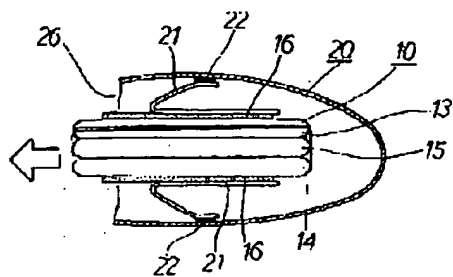
[Drawing 8]



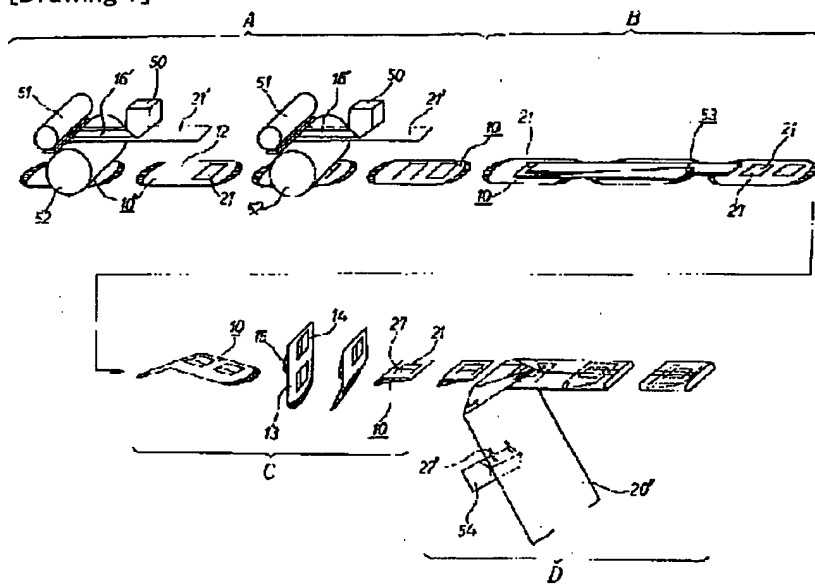
[Drawing 5]



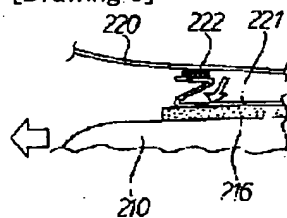
[Drawing 6]



[Drawing 7]



[Drawing 9]



[Translation done.]